

VZCZCXRO8645  
RR RUEH DU RUEHJO  
DE RUEHSA #0756/01 1011316  
ZNR UUUUU ZZH  
R 101316Z APR 08  
FM AMEMBASSY PRETORIA  
TO RUEHC/SECSTATE WASHDC 4106  
INFO RUEHTN/AMCONSUL CAPE TOWN 5500  
RUEHJO/AMCONSUL JOHANNESBURG 7984  
RUEH DU/AMCONSUL DURBAN 9724  
RUEAUSA/DEPT OF HHS WASHDC  
RUEHPH/CDC ATLANTA GA 2325

UNCLAS SECTION 01 OF 04 PRETORIA 000756

SIPDIS

SIPDIS  
SENSITIVE

DEPT. FOR AF/S; OES/IHB  
STATE PLEASE PASS OGAC: BPATEL; WCOGGINS  
STATE PLEASE PASS TO USAID/W FOR GH AND AFR/SA  
HHS/PHS FOR OFFICE OF GLOBAL HEALTH AFFAIRS WSTEIGER  
CDC FOR GLOBAL HEALTH OFFICE SBLOUNT

E.O. 12958: N/A

TAGS: [SOCI](#) [TBIO](#) [SENV](#) [EAID](#) [PGOV](#) [KHIV](#) [KSCA](#) [ZU](#) [SF](#)

SUBJECT: Explosive Growth of Dual TB-HIV Infection in South Africa  
- An Emerging Public Health Crisis

11. (U) Summary: South Africa (SA) is experiencing explosive twin epidemics of HIV/AIDS and tuberculosis (TB). The HIV epidemic in SA is fuelling the rise of an exploding TB epidemic since individuals infected with HIV are much more susceptible to TB and other serious infections. Poor diagnosis and management of TB cases in SA has led to increasing levels of TB, including Multi-Drug Resistant TB (MDR-TB) and Extensively Drug Resistant TB (XDR-TB), with consequent extraordinarily high mortality rates. Experts warn that HIV has the potential to fast track XDR-TB into an uncontrollable epidemic with serious public health consequences, not only for SA but for the whole African region and globally. The USG is expanding efforts supported by the US President's Emergency Plan for AIDS Relief (PEPFAR) and USAID's GHCS account (formerly known as the Child Survival and Health Account) to control these dual epidemics, by providing extensive support to TB control programs in the crisis areas, innovative models for integration of TB and HIV diagnosis, treatment and care, and support for development of a National TB Reference Lab. Experts have called for the South African Government (SAG) to mount an immediate stepped up crisis response to the emerging epidemics.

-----  
TB Burden in South Africa  
-----

12. (U) The scale of the TB epidemic in South Africa is staggering. For 2006, SA ranked as the country with the fourth highest burden of TB globally, in terms of absolute numbers of cases, deteriorating from its number 7 ranking in 2005. According to the recently released World Health Organization (WHO) statistics for 2006, despite a global slowdown in new TB cases since 2003, SA recorded the world's second highest rate of new cases per capita (incidence rate) - 940 cases per 100,000 of population, topped only by Swaziland. This reflects an increase of more than 300% since 1990 and more than 50% since 2005 (incidence rate of 600 per 100,000).

13. (U) A recent World Economic Forum Study reported that 85% of SA business leaders who responded to a study on the business community's response to TB expect TB-related impacts on their businesses in the next five years, with 24% expecting serious impacts. This is up sharply from the 2004 response where 55% of respondents were expecting impacts, with 12% expecting serious impacts. Three fourths of the people who fall sick and die are of prime working age, and those that survive may miss months of work due to TB. Workplaces can also be a fertile breeding ground for TB due to continuous exposure to infected colleagues, and in certain industries such as mining, the inhalation of dust and chemicals.

South African gold miners, for example, already had one of the highest incidence rates of tuberculosis in the world before the HIV epidemic, but rates remained stable between 1990 and 1999 among HIV-negative miners. However, due to their increased susceptibility, rates among HIV-positive miners increased by a factor of 10.

¶4. (U) The 2006 WHO statistics reflect that SA was a country with: one of the highest prevalence rates in the world, at 998 per 100,000; one of the highest prevalence rates in the world, at 998 per 100,000 of population (482,000 reported cases of TB); the second highest per capita number of deaths due to TB at 218 per 100,000 of population (105,179 deaths); and the highest total number of deaths due to HIV associated TB (64,757 persons or 134 per 100,000 of population). Approximately sixty percent of TB related deaths in SA were due to HIV associated TB (HIV/TB) and represented about 28% of globally reported deaths from HIV/TB. South Africa also represented almost 5% of global TB incidence and more than 6% of global TB deaths. The recent WHO report noted that at current rates of progress, the increase of TB in Africa and Europe will likely prevent the achievement of Millennium Target 6 - to halt and reverse TB incidence by 2015.

¶5. (SBU) Although these numbers are sobering, many experts believe that the real incidence and prevalence rates are actually much higher, since many HIV-positive individuals do not get tested for TB. At a recent CDC-organized conference of organizations supported by the President's Emergency Plan for AIDS Relief (PEPFAR) and working on TB, doctors commented that although doctors treating HIV-infected persons are legally required to perform TB-screening in SA, two-thirds of doctors do not. Similarly, WHO reported that in 2006 only one-third of TB patients were tested for HIV. Conference participants speculated that this is probably due to doctors being over-burdened, inadequate training of doctors with regard to the high correlation between HIV and TB, and a lack of skills and

PRETORIA 00000756 002 OF 004

equipment necessary to test for TB.

-----  
HIV and TB - the Dual Epidemics  
-----

¶6. (U) A lethal combination of TB and HIV is fuelling the TB epidemic in many parts of the world, including SA. TB is one of the leading causes of death in HIV-infected people. HIV/AIDS and TB are so closely connected that the term "co-epidemic" or "dual epidemic" is often used to describe their relationship (denoted as TB/HIV or HIV/TB). In 2006 in SA, 44% of new TB patients who were tested for HIV were HIV positive. However, about 80% of patients presenting with active tuberculosis in the Province of KwaZulu Natal (KZN), the South African province with the highest HIV prevalence, are co-infected with HIV. Each disease speeds up the progress of the other and TB considerably shortens the survival of people with HIV/AIDS. People who are HIV positive and infected with TB are up to 50 times more likely to develop active TB in a given year than HIV-negative people. HIV's impact on the immune system also increases the likelihood of people acquiring new TB infection and promotes both the progression of latent TB infection to active disease and relapse of the disease in previously treated patients.

¶7. (U) There are many challenges facing effective treatment of HIV/TB in SA. TB services in South Africa are frequently administered separately from HIV services. As a result, the dually-infected TB patient often has difficulty in getting appropriate HIV care. Traditionally, anti-retroviral treatment is administered at hospitals, while TB is treated at local clinics. TB treatment is therefore ordinarily not available in the ARV clinic setting and vice versa. Even if treatment is available at the same facility, there is frequently no coordination that would allow a rural patient to visit both TB and HIV treatment centers on the same day. This poses great financial hardships and transportation problems for poor rural patients who must often travel great distances to hospitals. Ultimately, these obstacles decrease the chances of a patient successfully completing a treatment regime.

The HIV and AIDS and STI Strategic Plan for South Africa 2007-2011 (NSP) advocates for the treatment of HIV within a clinical setting in an attempt to integrate TB and HIV treatment; however, this unfortunately is still not the norm in SA.

18. (U) TB treatment success rates in South Africa remain low, with death and default the most frequent negative outcomes. The Global TB cure rate for 2006 was 78%, while SA's cure rate was only 58%; the overall successful completion rate in SA was 71%, compared to the global rate of 85%. Rates of default from treatment were still high at 10%. Patients are usually not infectious within a few weeks of TB treatment and may feel much better. This can encourage some to stop their treatment, allowing drug-resistant strains of TB to emerge. Tuberculosis kills 30 to 40% of co-infected adults and one in five children. Routine monitoring and evaluation (M&E) systems in HIV clinics to monitor TB treatment are weak.

-----  
Innovative Activities Supported by PEPFAR  
QInnovative Activities Supported by PEPFAR  
-----

19. (U) The USG, through PEPFAR, is supporting innovative programs working to curb the growth of the HIV/TB epidemic. One such program is THAT'S IT (Tuberculosis, HIV & AIDS Treatment Support and Integrated Therapy), which is designed to ensure that patients suffering from TB and HIV receive a full range of services to effectively address both conditions. THAT'S IT is a unique partnership between the South African Medical Research Council (MRC), the Foundation for Professional Development (FPD) and the Department of Health. It represents a best-practice approach to a one-stop service for TB patients with HIV co-infection. The MRC reports that results from the integrated approach show a dramatic decrease in TB mortality (from 40% down to 12%) and an increase in TB case findings by up to 20% in clients presenting for HIV care.

110. (U) Another important program supported with PEPFAR funds is development of the TB/HIV African Centre for Integrated Laboratory Training (ACILT), which has the goal of accelerating the scale up of HIV/AIDS/TB diagnosis and strengthening laboratory capacity throughout the region. Establishment of a national reference laboratory is a key goal of South Africa's National Strategic Plan for Tuberculosis 2007-2011. In all of Africa, South Africa is one

PRETORIA 00000756 003 OF 004

of only two countries that have the diagnostic tools to identify XDR-TB disease, highlighting the crucial need for the center. ACILT will also be critical to the training and deployment of rapid diagnostic tests for TB that will give results in days, rather than months. Many HIV infected patients die from XDR-TB while waiting for TB test results. PEPFAR has additionally supported TB/HIV and MDR surveillance efforts, including enhancements in the electronic TB register software to permit the ability to measure TB treatment outcomes by HIV status. TB/HIV and MDR data collection tools have been revised to help reduce barriers to more widespread TB/HIV and MDR surveillance.

-----  
Emergence of Drug Resistant TB  
-----

111. (U) A troubling aspect of the resurgence of TB is the emergence of drug-resistant strains. Drug-resistant cases, especially those diagnosed with the extensively drug-resistant (XDR) strain, create many challenges. Resistance to TB drugs can develop when patients fail to take their medication as prescribed and through direct transmission from person to person. MDR-TB fails to respond to the two most powerful anti-TB drugs, while XDR-TB is resistant to these and at least two others. The national cure rate in South Africa for MDR-TB stands at 50%, falling far short of international targets of 80%. The MDR strains are much more difficult and costly to treat than non-drug resistant TB. MDR-TB is often fatal, with mortality rates comparable to those for TB in the days before development of antibiotics. While six months of out-patient treatment for non-drug resistant TB costs about R400 (approximately \$50), XDR-TB drugs cost around R100,000 (approximately \$12,000) and patients are required to

stay up to 24 months in the hospital.

¶12. (U) The National Department of Health reported 419 cases of XDR-TB for 2006 and 221 cases for the first quarter of 2007, compared to 74 in all 2004. More than 60% of all XDR-TB cases reported are from KZN Province. Dr. Karin Weyer, tuberculosis research director at the South Africa Medical Research Council (MRC), commented that nobody really knows the true number of cases due to laboratory and diagnostics constraints and inconsistencies in reporting. Dr. Weyer estimates that the rate of treatment failure for MDR-TB is about 10 percent and assumes that most failures are due to the XDR-TB form. (Note: WHO 2006 statistics reflect 6,716 cases of confirmed MDR-TB, which would translate to more than 600 cases of XDR-TB in SA each year. End Note) Dr. Weyer has warned that "HIV has the potential to fast track XDR-TB into an uncontrollable epidemic."

¶13. (U) In KZN Province, half the XDR cases in patients with HIV infection were acquired in hospitals or clinics, and several occurred in health care workers. Mortality exceeded 95%. XDR and MDR-TB in three years have killed eight medical staff and 250 patients in just one hospital - Tugela Ferry's Church of Scotland Hospital, the epicenter of the epidemic in KZN Province. Dr. Tony Moll, principal medical officer at the hospital has reported that all of the XDR-TB patients tested were HIV positive, most had not. All of the XDR-TB patients tested were HIV positive, most had not received treatment for TB, and none had been exposed to the second-line TB drugs to which they were resistant. This would mean that their disease was not a result of poor adherence to TB treatment. Dr. Moll was one of the authors of a study published in the Lancet that used a mathematical model to simulate TB transmission in a rural, high HIV prevalence area such as Tugela Ferry. He reported that in KZN the rate of MDR-TB in new patients was reported at 1.7% between 2000 and 2002; whereas, the rate was 9% in a study integrating treatment for TB and HIV from 2003 to 2006 in that region. The computer model calculated that more than 1,300 cases of XDR-TB could arise in the Tugela Ferry region by the end of ¶2012. However, the study concluded that implementation of a combination of infection control strategies appropriate in limited resource settings could avert nearly half of XDR-TB cases over the next 5 years. Addressing infection control is also an important priority for PEPFAR supported partners throughout SA.

-----  
Frontal Assault Needed  
-----

¶14. (U) Dr. Weyer has commented that drug resistant TB forms represent an unfortunate failure of TB control. "The low TB cure rates and high rates of default from first-line TB treatment create a fertile environment for the development of MDR-TB and, eventually,

PRETORIA 00000756 004 OF 004

XDR-TB. TB drug resistance needs a frontal assault; infection control precautions are needed now and must be scaled-up without delay in settings where HIV patients are brought together," she said. According to Dr. Mario Raviglione, director of the WHO Stop TB Department, "If countries and the international community fail to address it aggressively now, we will lose this battle."

¶15. (U) Experts are calling on the SAG to take immediate actions aimed at: improving infection control, getting more people living with HIV tested for TB, testing those living with TB for HIV, integrating and decentralizing TB and HIV services, and preventing and treating drug-resistant TB. According to Dr. Weyer, three actions should immediately begin: TB patients need to be cured the first time around to prevent the emergence of drug resistance, cases must be much more rapidly diagnosed - with intensified surveillance in each of the provinces in South Africa, and existing cases that are being diagnosed must be quickly and appropriately treated. Joining these calls for urgent action, the National Education Health & Allied Workers Union (NEHAWU) recently issued a press release expressing its concerns with the perennial weakness of SA's response to TB. NEHAWU stated, "With the current shortage of trained and qualified staff in SA, the mortality rate could plunge the country into a serious pandemic."

¶16. (U) In 2006, the SAG developed the TB Crisis Plan, which focuses on social mobilization and multi-sectoral engagement. It initially targets three provinces and four districts with high caseloads and unsatisfactory performance. In 2007, the SAG adopted the Tuberculosis Strategic Plan for South Africa 2007-2011. In its forward, the Minister of Health acknowledges the negative effects of TB on the labor force and on GDP. The plan cites many of the challenges faced and calls for a multi-sectoral approach to tackle TB. NEHAWU, however, has commented that the TB strategic plan is inadequate and is calling for enactment of an emergency plan with short term measures to contain MDR and XDR-TB. In the coming year, the MOH will roll out new TB testing systems and equipment across SA's nine provinces to improve the accuracy and reliability of tests. Further, the SAG is planning on a dramatic increase in funding for 2007 and 2008, principally for investment in infrastructure associated with MDR and XDR-TB.

-----  
COMMENT  
-----

¶17. (SBU) In September 2006, the WHO said a response akin to recent global efforts to control SARS and bird flu was needed to curb XDR-TB disease in South Africa. This has not yet materialized. The coming year will be a crucial test of the SAG's commitment and ability to gear up to control this disease and its potentially devastating impacts on South Africa and beyond. Priorities for the USG South Africa PEPFAR team in the coming year will include increasing HIV testing for TB patients and TB screening for HIV patients; strengthening labs and the ability to perform rapid diagnostic testing; improving infection control; diagnosis and management of MDR and XDR-TB; and enhancing surveillance for TB/HIV.

BOST